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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,919	06/21/2001	Rodrigo Munoz	G03.011	6655
28062 75	590 09/23/2002			
BUCKLEY, MASCHOFF, TALWALKAR, & ALLISON 5 ELM STREET			EXAMINER	
			FELTEN, DANIEL S	
NEW CANAA	N, CT 06840			
			ART UNIT	PAPER NUMBER
			3624	3
			DATE MAILED: 09/23/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/886,919

Applicant(s)

Munoz

Examiner

Daniel Felten

Art Unit **3624**

	The MAILING DATE of this communication appears	on the cover sheet with the correspondence address			
	for Reply				
	ORTENED STATUTORY PERIOD FOR REPLY IS SET MAILING DATE OF THIS COMMUNICATION.	TO EXPIRE 3 MONTH(S) FROM			
- Extens	ions of time may be available under the provisions of 37 CFR 1.136 (a). In r	no event, however, may a reply be timely filed after SIX (6) MONTHS from the			
- If the s	date of this communication. Period for reply specified above is less than thirty (30) days, a reply within th	e statutory minimum of thirty (30) days will be considered timely.			
- If NO p	period for reply is specified above, the maximum statutory period will apply a to reply within the set or extended period for reply will, by statute, cause th	nd will expire SIX (6) MONTHS from the mailing date of this communication. e application to become ABANDONED (35 U.S.C. § 133).			
- Any re	ply received by the Office later than three months after the mailing date of the patent term adjustment. See 37 CFR 1.704(b).	nis communication, even if timely filed, may reduce any			
Status	patent term adjustment. 366 37 GTV 1.704(b).				
1) 💢	Responsive to communication(s) filed on Jun 21, 20	001			
2a) 🗌	This action is FINAL . 2b) 💢 This action	on is non-final.			
3) 🗆	Since this application is in condition for allowance e closed in accordance with the practice under Ex pair	xcept for formal matters, prosecution as to the merits is te Quayle, 1935 C.D. 11; 453 O.G. 213.			
Disposi	tion of Claims				
4) 💢	Claim(s) <u>1-24</u>	is/are pending in the application.			
4	la) Of the above, claim(s)	is/are withdrawn from consideration.			
	Claim(s)				
6) 💢	Claim(s) <u>1-24</u>	is/are rejected.			
7) 🗆	Claim(s)	is/are objected to.			
8) 🗆	Claims	are subject to restriction and/or election requirement.			
Applica	ition Papers				
9) 🗆	The specification is objected to by the Examiner.				
10)	The drawing(s) filed on is/are	a) \square accepted or b) \square objected to by the Examiner.			
	Applicant may not request that any objection to the d	rawing(s) be held in abeyance. See 37 CFR 1.85(a).			
11)	The proposed drawing correction filed on	is: a) \square approved b) \square disapproved by the Examiner.			
	If approved, corrected drawings are required in reply t				
12)	The oath or declaration is objected to by the Exami	ner.			
	under 35 U.S.C. §§ 119 and 120				
13)	Acknowledgement is made of a claim for foreign pr	iority under 35 U.S.C. § 119(a)-(d) or (f).			
a) [☐ All b)☐ Some* c)☐ None of:				
	1. \square Certified copies of the priority documents hav	e been received.			
	2. \square Certified copies of the priority documents hav	e been received in Application No			
	application from the International Bure				
	ee the attached detailed Office action for a list of the				
14)∟	Acknowledgement is made of a claim for domestic				
	The translation of the foreign language provisional				
	Acknowledgement is made of a claim for domestic	priority under 35 0.3.6. 33 120 drid/or 121.			
Attachm	eent(s) otice of References Cited (PTO-892)	4) Interview Summary (PTO-413) Paper No(s).			
	otice of Draftsperson's Patent Drawing Review (PTO-948)	5) Notice of Informal Patent Application (PTO-152)			
	3) X Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 6) Other:				
, T					

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DETAILED ACTION

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Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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- 2. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tom (US 5,696,907).
- 13 Regarding claims 1-3:
- Tom discloses a method of evaluating an application for an financial product (see Tom,
- 15 Abstract), comprising:
- receiving application data (see Tom, col. 3, ll. 43-62);
- calculating, based at least in part one application data, expected loss data (see Tom, at
- least col. 2, 11. 9-24); and
- Tom fails to disclose calculating, based at least in part on the expected loss data, a
- return on investment for the application. However, since the invention's objective is to
- minimize loss and provide business expansion (see Tom, at least col. 2, ll. 9-24; col. 2, ll.
- 18-21), it would have been obvious for an artisan of ordinary skill at the time of the invention
- of Tom to expect a greater return on investment for reduction of loss because such a feature
 - would inherently be the inverse effect of a reduction of loss in the system. In other words, an

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increase in the return on investment would be what the one of ordinary skill in the art would

expect when losses are reduced. Thus such a feature would have been obvious to one of

3 ordinary skill in art.

Regarding claim 4:

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- wherein the application data includes at least one of a collateral identifier, credit related
- information and payment information (see Tom, col. 3, 11. 40-62)

9 Regarding claim 5:

- wherein the calculating expected loss data comprises: executing an account level loss forecast
- model; executing a terminal event model; and calculating expected lost data in response to the
- execution of the account level loss forecast model and the execution of the terminal event
- 13 model (see Tom, col. 6, 11, 47+)

15 Regarding claim 6:

- wherein executing an account level loss forecast model further comprises: calculating future
- value for an item of collateral associated with the application (see Tom, col. 6, ll. 47+)

Regarding claim 7:

- wherein calculating expected loss data further comprises: storing price tier data; executing a
- 21 risk model to compute a credit risk; assigning the credit risk to a price tier based on the price
- tier data; and generating probabilities of one or more of the termination events occurring
- before the expiration to form one or more termination scenarios (see Tom, col. 6, 11. 47+).

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Regarding claim 8:

- the calculating a return on investment further comprises: forecasting the severity of loss of the
- termination scenarios to form one or more loss scenarios; calculating net income and
- annualized net investment for the loss scenarios; determining expected net income and expected
- annualized net investment in response to the calculating; and determining expected return on
- 6 investment based on a ratio comprising expected net income and the expected annualized net
- investment (see Tom, col. 6, ll. 47+).

Regarding claim 9:

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wherein the generating probabilities further comprises:

generating probabilities of the termination events occurring in relation to a plurality of the payment times (see Tom, col. 6, ll. 47+).

Regarding claim 10:

wherein the forecasting the severity of loss further comprises:

forecasting the severity of loss of the termination scenarios for at least a plurality of the payment times (see Tom, col. 6, ll. 47+)

Regarding Claim 11:

- wherein said financial product requires an item of collateral and wherein said forecasting
- comprises: forecasting a current balance on book; forecasting a market value of said collateral;

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and calculating a difference between said current balance on book and said market value of said

collateral (see Tom, col. 6, ll. 47+).

4 Regarding Claim 12:

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- wherein said forecasting a market value is performed using at least one of: Winter's
- 6 multiplicative time series estimation; or an exponential decay between a manufacturer suggested
- retail price of said collateral and a residual value of said collateral at the expiration (see Tom,
- 8 col. 6, 11. 47+).

10 Regarding Claim 13:

wherein said financial product is a lease (see Tom, col. 6, ll. 47+).

13 Regarding Claim 14:

- wherein said termination events comprise at least one of: repossession with delinquencies, early
- payoff, insurance loss, and repossession without delinquencies (see Tom, col. 6, 11. 47+).

17 Regarding Claim 15:

wherein said financial product is a loan (see Tom, col. 6, ll. 47+).

Regarding Claim 16:

- wherein said termination events comprise at least one of: repossession, non-collateralized loss
- and early payoff (see Tom, col. 6, 11.47+).

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Regarding Claim 17:

- A computer-readable medium bearing a computer program containing instruction steps such that
- upon installation of said computer. program in a general purpose computer, the computer is
- capable of performing the method of claim 1 (see Tom, col. 2, ll. 18-21); .

6 Regarding Claim 18:

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- A method of evaluating an application for a financial product for which at least one price tier has
- been established, the method comprising:
- 9 receiving application data; executing a risk model to compute a credit risk for said application
- data; assigning said credit risk to a price tier; generating probabilities of one or more termination
- events occurring before an expiration of said financial product to form one or more termination
- scenarios; forecasting the severity of loss of said termination scenarios; calculating, based at least
- in part on said severity of loss of said termination scenarios, a return on investment (ROI) for
- said application; and approving said application if said calculated ROI is within an expected ROI
- threshold (see Tom, col. 6, 11.47+).

Regarding Claim 19:

- An apparatus for evaluating an application for a financial product, the apparatus comprising: a
- 20 processor; a communication device, coupled to said processor, receiving application data from at
- least a first user device; and a storage device in communication with said processor and storing
- instructions adapted to be executed by said processor to: calculate, based at least in part on said

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application data, expected loss data; and calculate, based at least in part on said expected loss

data, a return on investment (ROI) for said application (see Tom, col. 6, ll. 47+).

Regarding Claim 20:

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- 5 The apparatus of claim 18, said storage device further storing instructions adapted to be
- executed by said processor to: make an application approval decision based on said calculated
- 7 ROI (see Tom, col. 6, 11. 47+).

9 Regarding Claim 21:

A system for evaluating an application for a financial product for which at least one price tier has been established, the system comprising: at least a first user device having a processor; a communication device, coupled to said processor, configured to send and receive data over a network; and a storage device in communication with said processor and storing instructions adapted to be executed by said processor to receive application data; and forward said application data to an at least first lender device said at least first lender device having a second processor, a second communication device, coupled to said second processor, configured to send and receive data over said network and to receive said application data; and a second storage device in communication with said second processor and storing instructions adapted to be executed by said second processor to execute a risk model to compute a credit risk for said application data; assign said credit risk to a price tier; generate probabilities of one or more termination events occurring before an expiration of said financial product to form one or more termination scenarios; forecast the severity of loss of said termination scenarios; calculate, based at least in

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part on said severity of loss of said termination scenarios, a return on investment (ROI) for said

application; and approve said application if said calculated ROI is within an expected ROI

threshold (see Tom, col. 6, 11.47+).

6 Regarding Claim 22:

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- A computer program product in a computer readable medium for evaluating an application for a
- financial product, comprising: first instructions for receiving application data; second
- 9 instructions for calculating, based at least in part on said application data, expected loss data;
- third instructions for calculating, based at least in part on said expected loss data, a return on
- investment (ROI) for said application; and fourth instructions for approving said application if
- said calculated ROI is within an expected ROI range for said financial product (see Tom, col. 6,
- 13 ll. 47+).

Regarding Claim 23:

A system for evaluating an application for a financial product, the system 3 comprising: means

for receiving application data; means for calculating, based at least in part on said application

data, 6 expected loss data; and means for calculating, based at least in part on said expected loss

data, a return on investment for said application (see Tom, col. 6, ll. 47+).

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Regarding Claim 24:

- comprising means for comparing said return on investment with an expected return on
- investment; and means for making an application approval decision based on said return on
- investment (see Tom, col. 6, ll. 47+).

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Conclusion

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3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Daniel S. Felten* whose telephone number is (703) 305-0724. The examiner can normally be reached between the hours of 7:00AM to 5:30PM Monday-Thursday. Any inquiry of a general nature relating to the status of this application or its proceedings should be directed to the Customer Service Office (703) 306-5631, or the examiner's supervisor

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4. Response to this action should be mailed to:

Vincent Millin whose telephone number is (703) 308-1065.

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- Commissioner of Patents and Trademarks
- Washington, D.C. 20231

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for formal communications intended for entry, or (703) 305-0040, for informal or draft communications, please label "Proposed" or "Draft".

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be

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addressed to [daniel.felten@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1 195 OG 89.

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10 **DS**

September 19, 2002

VINCENT MILLIN SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600